



October 15, 2019

Mr. Clayton E. Dickey
Rasmussen, Dickey & Moore, LLC
Suite 300
1001 E. 101st Terrace
Kansas City, MO 64131

RE: Klopman-Baerselman v. Air & Liquid Systems Corporation, et al.
RJ Lee Group Project Number LLH910447

Mr. Dickey,

At your request, I have reviewed materials in the above referenced matter from plaintiff experts Gordon and Fitzgerald. Assuming the fiber burden analysis conducted by Gordon is correct, Mr. Klopman-Baerselman was exposed to sources of commercial amphibole asbestos (amosite and crocidolite); it is incorrect to attribute the reported minerals in his tissue to exposure to a chrysotile asbestos – containing product. However, it is unclear from the produced documents that the fiber identifications in the tissue analyses are correct.

I reviewed the following documents in preparation of this report:

- Ronald E. Gordon (undated). *Report of Ronald E. Gordon, Ph.D.*, including supporting laboratory records
- Sean Fitzgerald (2019). *Rudie Klopman-Baerselman Gasket and Clutch Testing*, including attached testing reports, Scientific Analytical Institute, September 9, 2019
- Plaintiff's FRCP 26(A)(2) Expert Disclosures, September 13, 2019.

Dr. Gordon tested tissue from the decedent and identified crocidolite, amosite, and anthophyllite in the lung tissue. He explained the anthophyllite as a marker for past exposure to chrysotile asbestos. The supplemental laboratory data produced by Dr. Gordon are not supportive of his conclusions. The diffraction data are, at best, indecipherable while the elemental compositions appear to have been selectively interpreted.

Mr. Fitzgerald has written an extensive report that seems to ignore any possible exposure of Mr. Klopman-Baerselman to crocidolite and amosite and instead focuses on possible chrysotile exposure resulting from manipulation of gaskets. He contradicts Dr. Gordon's conclusions when he writes:

"This asbestos included not only chrysotile serpentine asbestos, but also amphibole asbestos, most commonly tremolite. This amphibole presence is consistent with what is known about the geology of the chrysotile asbestos source ores." (page 18 of 18)

Note that Mr. Fitzgerald suggests that tremolite is a contaminant of chrysotile ores, but not anthophyllite.

There have been cases in the past where observed anthophyllite and/or tremolite was attributed to exposure to other materials, such talc-based products. Tremolite is found throughout nature as a component of many rocks – including limestone, micas, and other ores. I am not aware of reports of any amphibole contamination of chrysotile from western Canada. Even in eastern Canada, tremolite appears to be centered around Thetford mines, but not around the mines near Asbestos, Canada. Amphibole minerals can also be found in soils throughout the United States.¹ Therefore, to attribute anthophyllite and/or tremolite (and actinolite) to exposure only to chrysotile is incorrect.

These are some of the issues that are apparent in the produced documents. I can speak to other issues if needed.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Drew R. Van Orden". The signature is fluid and cursive, with the first and last names being more prominent.

Drew R. Van Orden, PE
Senior Consulting Scientist

¹ B. D. Thompson, M. E. Gunter, and M. A. Wilson (2011). "Amphibole Asbestos Soil Contamination in the USA: A Matter of Definition", *American Mineralogist*, 96, p. 690-693.